Listing of the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously Presented) A system for detecting cracks in optical discs, said disc having an outer edge and an inner edge, said system comprising :

a disc drive for spinning said optical disc at a plurality of speeds including a normal operating speed and a lower speed;

at least one transmitter for propagating a light signal through said optical disc,

at least one receiver for receiving said light signal emerging from said disc; and

a microcontroller coupled to said receiver for analyzing the received light signals; wherein the disc drive is maintained at the lower speed during crack detecting, and at the normal operating speed if no crack is detected.

2. (Cancelled)

3. (Previously Presented) A system according to claim 1 wherein said receiver is adapted to receive unreflected propagated signals emerging from said disc.

4. (Previously Presented) A system according to claim 1 wherein said receiver is adapted to receive propagated signals reflected by at least one crack in said disc.

5-7. (Cancelled)

8. (Previously Presented) An optical disc drive comprising a traverse mechanism for spinning said disc and retrieving information from said disc, a loader mechanism for loading said disc onto said traverse mechanism, and a crack detection mechanism, said crack detection mechanism comprising:

a transmitter, mounted on said disc drive, for propagating a light signal through the interior of said spinning optical disc;

a receiver mounted on said disc drive and having a light sensor positioned to receive light signals emerging from said disc; and

a microcontroller, coupled to said receiver, for analysing received light signals, and for sending a command to the disc drive based on the received light signals, the command being selected from the group consisting of: operate at a normal speed, maintain a lower speed, slow the disc drive, and halt the disc drive.

9. (Previously Presented) An optical disc drive according to claim 8 wherein said receiver is adapted to receive reflected propagated light emerging from said disc, said reflected propagated light generated by a crack positioned along the path of said propagated light.

10. (Previously Presented) A method for detecting cracks in optical discs comprising :

rotating said optical disc;

propagating an optical signal through the interior of said rotating optical disc, wherein said optical signal is propagated along the plane of said disc;

receiving said propagated signal; and

analysing the pattern of the received signal to determine if a crack is present in said optical disc; and

sending a command to the disc drive based on the received light signals, the command being selected from the group consisting of: operate at a normal speed, maintain a lower speed, slow the disc drive, and halt the disc drive.

11. (Previously Presented) A method for detecting cracks in optical discs comprising:

loading said optical disc into a disc drive;

rotating said disc drive at a low speed;

propagating an optical signal through said optical disc;

receiving said propagated signal from said optical disc;

analysing said received signal to determine if a crack is present on said optical disc; and

sending the appropriate command to said disc drive,

wherein when a crack is present, said command comprises:

sending information to the user to indicate that a crack has been detected; and

requesting said user to select between a first and a second option, said first option comprising maintaining said optical disc rotating at a slow speed, and retrieving information from said optical disc, said second option comprising stopping said rotation.

12. (Cancelled)

13. (Previously Presented) A method according to claim 10 wherein said optical signal is further propagated along a path that is approximately tangential to the inner edge of said disc.

14. (Cancelled)

15. (Original) A method according to claim 11 wherein said crack radiates from the inner edge of said disc; said optical signal is further propagated along a path that is approximately tangential to the inner edge of said disc, the closest distance between said path and said inner edge being the length of the shortest crack to be detected.

16. (Original) A method according to claim 11 wherein said light signal is propagated along a path that traverses the plane of said optical disc, said path traversing said disc at a position proximate said inner edge.

17. (Previously Presented) An optical disc drive according to claim 8 wherein said receiver is adapted to receive unreflected propagated light emerging from said disc.

18. (Currently Amended) A system for detecting cracks in optical discs, said disc having an outer edge and an inner edge, said system comprising :

a disc drive for spinning said optical disc;

at least one transmitter positioned below said optical disc for propagating a light signal ~~through~~ directed towards the inner edge of said optical disc,

at least one receiver configured for receiving ~~said~~ propagated light signal reflected by at least one crack in ~~emerging from~~ said disc; and

a microcontroller coupled to said receiver for analysing received light signals, wherein the system is configured to detect the presence of a crack by an increase in propagated light received by the at least one receiver.

19. (Currently Amended) A system according to claim 18 wherein said receiver is ~~adapted to receive unreflected propagated signals emerging from said disc~~ located below said disc.

20. (Cancelled)

21. (Currently Amended) An optical disc drive comprising a traverse mechanism for spinning said disc and retrieving information from said disc, a loader mechanism for loading said disc onto said traverse mechanism, and a crack detection mechanism, said crack detection mechanism comprising:

a transmitter positioned below said optical disc for propagating a light signal through the interior of said spinning optical disc;

a receiver mounted on said disc drive and having a light sensor positioned to receive said light signal emerging from said disc, wherein said receiver is adapted to receive propagated signals reflected by at least one crack in said disc; and

a microcontroller, coupled to said receiver for analysing received light signals.

22 - 23. (Cancelled)

24. (Previously Presented) A system according to claim 1 wherein if one or more cracks is detected, the disc drive is maintained at the lower speed or halted.

25. (Previously Presented) A system according to claim 1 wherein if one or more cracks is detected, a brake is applied to a spindle of a motor of the disc drive.

26. (Previously Presented) A system according to claim 25 wherein the brake is applied to halt the spindle.

27. (Previously Presented) A system according to claim 26 wherein the brake is applied to slow down the spindle.

28. (Previously Presented) An optical disc drive according to claim 8, wherein the disc drive is maintained at the lower speed during crack detection, and operated at the normal speed if no crack is detected.

29. (Previously Presented) An optical disc drive according to claim 28 wherein if one or more cracks is detected, the disc drive is maintained at the lower speed or halted.

30. (Previously Presented) An optical disc drive according to claim 28, wherein if one or more cracks is detected, a brake is applied to a spindle of a motor of the disc drive.

31. (Previously Presented) An optical disc drive according to claim 30 wherein the brake is applied to halt the spindle.

32. (Previously Presented) A method according to claim 10 wherein the disc drive is maintained at the lower speed during crack detecting, and operated at the normal speed if no crack is detected.

33. (Previously Presented) A method according to claim 10 wherein if one or more cracks is detected, the disc drive is maintained at the lower speed or halted.

34. (Previously Presented) A method according to claim 10 wherein if one or more cracks is detected, a brake is applied to a spindle of a motor of the disc drive.

35. (Previously Presented) A method according to claim 34 wherein the brake is applied to halt the spindle.

36. (Previously Presented) A method according to claim 11 wherein if no crack is present in said optical disc, said command comprises operating at a normal speed.

37. (Previously Presented) A system according to claim 18 wherein said microcontroller further sends a command to the disc drive based on the received light signals, the command being selected from the group consisting of: operate at a normal speed, maintain a lower speed, slow the disc drive, and halt the disc drive.

38. (Previously Presented) A system according to claim 37 wherein the disc drive is maintained at the lower speed during crack detecting, and operated at the normal speed if no crack is detected.

39. (Previously Presented) A system according to claim 37 wherein if one or more cracks is detected, the disc drive is maintained at the lower speed or halted.

40. (Previously Presented) A system according to claim 37 wherein if one or more cracks is detected, a brake is applied to a spindle of a motor of the disc drive.

41. (Previously Presented) A system according to claim 40 wherein the brake is applied to halt the spindle.

42. (Previously Presented) An optical disc drive according to claim 21 wherein said microcontroller further sends a command to the disc drive based on the received light signals, the command being selected from the group consisting of: operate at a normal speed, maintain a lower speed, slow the disc drive, and halt the disc drive.

43. (Previously Presented) An optical disc drive according to claim 42 wherein the disc, drive is maintained at the lower speed during crack detection, and operated at the normal speed if no crack is detected.

44. (Previously Presented) An optical disc drive according to claim 43 wherein if one or more cracks is detected, the disc drive is maintained at the lower speed or halted.

45. (Previously Presented) An optical disc drive according to claim 43 wherein if one or more cracks is detected, a brake is applied to a spindle of a motor of the disc drive.

46. (Previously Presented) An optical disc drive according to claim 45 wherein the brake is applied to halt the spindle.

47. (New) An optical disc drive system comprising:

an optical disc drive configured for performing an inspection operation of the disc and at least one of a read and write operation on the disc;

a transmitter for propagating a light signal through the interior of said spinning optical disc; and

a receiver positioned to receive light emerging from said disc, wherein the transmitter and the receiver are configured to determine the presence of a crack in the disc during the inspection operation.

48. (New) The optical disc drive system according to claim 47 wherein the transmitter is positioned such that the light signal is propagated from a point on the outer edge of the disc and along the plane of the disc.

49. (New) The optical disc drive system according to claim 47 wherein the receiver is configured to receive reflected propagated light emerging from the disc.

50. (New) The optical disc drive system according to claim 47 wherein the receiver is configured to receive unreflected propagated light emerging from the disc.

51. (New) The optical disc drive system according to claim 47 wherein the receiver is configured to receive unreflected propagated light emerging from the disc and wherein the

presence of a crack is determined by a decrease in the quantity of unreflected propagated light emerging from the disc.

52. (New) The optical disc drive system as recited in claim 47 further comprising a microcontroller coupled to said receiver for analyzing signals received thereof.